In the Claims

1. (currently amended) A video imaging system comprising:

a camera control unit for processing a digital image signal;

a cable, connected to said camera control unit, for transmitting the digital image signal to said camera control unit; and

a camera head, connected to said cable, for providing the digital image signal, said camera head including:

an imager, for generating an analog image signal;

a timing generator, generating a timing signal particular to said camera head, the timing signal actuating said imager and sent to said camera control unit;

a converter, for converting the analog image signal into the digital image signal; and

a serializer, for serializing the digital image signal for transmission over said cable;

at least one digital serial driver;

said camera control unit having at least one digital serial receiver and is controlled ~~programmed~~ based at least in part upon said timing signal particular to said camera head.

2. (original) The video imaging system according to claim 1 wherein said camera head further comprises a multiplexer, for generating a multiplexed signal, which includes the digital image signal and control signals.

3. (original) The video imaging system according to claim 1 wherein said camera head further comprises a processor.

4. (original) The video imaging system according to claim 3 wherein said camera head further comprises a memory device, accessible by said processor, containing camera head information.

5.-7. (cancelled)

8. (original) The video imaging system according to claim 1 wherein said camera head utilizes at least one digital serial receiver.

9. (currently amended) Said camera head according to claim 1 ~~7~~ wherein the at least one digital serial driver utilizes Low-Voltage Differential Signals.

10. (original) Said camera head according to claim 8 wherein the at least one digital serial receiver utilizes Low-Voltage Differential Signals.

11. (original) The video imaging system according to claim 1 wherein said camera control unit utilizes at least one digital serial driver.

12. (cancelled)

13. (original) Said camera control unit according to claim 11 wherein the at least one digital serial driver utilizes Low-Voltage Differential Signals.

14. (currently amended) Said camera control unit according to claim 1 ~~12~~ wherein the at least one digital serial receiver utilizes Low-Voltage Differential Signals.

15. (currently amended) A video imaging system comprising:

a camera control unit for processing an image signal;

a cable, connected to said camera control unit, for transmitting the image signal to said camera control unit; and

a camera head, connected to said cable, for providing the image signal, said camera head including:

an imager, for generating the image signal; and

a timing generator, generating a timing signal particular to said camera head, the timing signal actuating said imager and sent to said camera control unit;

at least one digital serial driver;

said camera control unit having at least one digital serial receiver and is controlled ~~programmed~~ based at least in part upon said timing signal particular to said camera head;

wherein a plurality of camera heads, each with differing timing signals, are attachable to and controlled by said camera control unit.

16. (original) The video imaging system according to claim 15 wherein said camera head produces analog image data, said camera head further comprising a converter, for converting an analog image signal to a digital image signal.

17. (original) The video imaging system according to claim 15 wherein said camera head further comprises a multiplexer, for generating a multiplexed signal, which includes the image signal and control signals.

18. (original) The video imaging system according to claim 15 wherein said camera head further comprises a serializer, for serializing the image signal.

19. (original) The video imaging system according to claim 15 wherein said camera head further comprises a processor.

20. (original) The video imaging system according to claim 19 wherein said camera head further comprises a memory device, accessible by said processor, containing camera head information.

21.-22. (cancelled)

23. (currently amended) The video imaging system according to claim 15 wherein said ~~camera head utilizes~~ at least one digital serial driver utilizes ~~utilizing~~ Low-Voltage Differential Signals.

24. (currently amended) The video imaging system according to claim 15 wherein said ~~camera control unit utilizes~~ at least one digital serial receiver utilizes ~~utilizing~~ Low-Voltage Differential Signals.

25. (previously presented) A video imaging system comprising:

a camera control unit for processing a digital image signal;

a cable, connected to said camera control unit, for transmitting the digital image signal to said camera control unit; and

a camera head, connected to said cable, for providing the digital image signal, said camera head including:

an imager, for generating an analog image signal;

a converter, for converting the analog image signal into the digital image signal; and

a serializer, for serializing the digital image data.

26. (original) The video imaging system according to claim 25 wherein said camera head further comprises a multiplexer, for generating a multiplexed signal, which includes the digital image signal and control signals.

27. (cancelled)

28. (original) The video imaging system according to claim 25 wherein said camera head further comprises a processor.

29. (original) The video imaging system according to claim 28 wherein said camera head further comprises a memory device, accessible by said processor, containing camera head information.

30. (original) The video imaging system according to claim 25 wherein an inputted data formats the camera control unit.

31. (original) The video imaging system according to claim 30 wherein the inputted data comes from the camera head.

32. (original) The video imaging system according to claim 25 wherein said camera head utilizes at least one digital serial driver utilizing Low-Voltage Differential Signals.

33. (original) The video imaging system according to claim 25 wherein said camera control unit utilizes at least one digital serial receiver utilizing Low-Voltage Differential Signals.

34. (previously presented) A video imaging system comprising:

a camera control unit for processing a digital image signal;

a cable, connected to said camera control unit, for transmitting the digital image signal to said camera control unit; and

a camera head, connected to said cable, for providing the image digital signal, said camera head including:

an imager, including an analog to digital converter for generating a digital image signal; and

a serializer, for serializing the digital image signal for transmission over said cable.

35. (original) The video imaging system according to claim 34 wherein said camera head further comprises a multiplexer, for generating a multiplexed signal, which includes the image signal and control signals.

36. (original) The video imaging system according to claim 34 wherein said camera head further comprises a processor.

37. (original) The video imaging system according to claim 36 wherein said camera head further comprises a memory device, accessible by said processor, containing camera head information.

38. (original) The video imaging system according to claim 34 wherein an inputted data formats the camera control unit.

39. (original) The video imaging system according to claim 38 wherein the inputted data comes from the camera head.

40. (original) The video imaging system according to claim 34 wherein said camera head utilizes at least one digital serial driver utilizing Low-Voltage Differential Signals.

41. (original) The video imaging system according to claim 34 wherein said camera control unit utilizes at least one digital serial receiver utilizing Low-Voltage Differential Signals.

42. – 48. (cancelled)